

WHAT IS CLAIMED IS:

1. A filter for an ink jet pen, comprising a filter material configured to attach to the pen, wherein a flow of ink through the filter material is substantially multidirectional.
2. The filter as in claim 1, wherein an effective filtration surface area of the filter is substantially greater than any projection surface area of the filter.
3. The filter as in claim 1, wherein the filter material comprises pores having a dimension less than a dimension of a smallest ink flow passage in the pen.
4. The filter as in claim 1, wherein the filter material is pleated.
5. The filter as in claim 1, wherein the filter comprises a chamber at least partially bounded by the filter material.
6. The filter as in claim 5, wherein a flow direction of ink into the chamber is substantially different than a flow direction of ink from the chamber.
7. The filter as in claim 6, wherein the filter material comprises more than half of a surface area of the chamber.
8. The filter as in claim 5, wherein the chamber is configured to house a regulator.
9. The filter as in claim 5, wherein the filter material is configured to attach to the pen via an ink passage flange.
10. The filter as in claim 9, wherein ink flows into the chamber via the flange.
11. The filter as in claim 9, wherein ink flows from the chamber via the flange.

12. The filter as in claim 9, wherein the flange is attached to the filter material by an adhesive.
13. The filter as in claim 9, wherein the flange is attached to the filter material by melting the flange.
14. The filter as in claim 1, wherein the filter is cylindrical.
15. The filter as in claim 1, wherein the filter has a rectangular cross section.
16. The filter as in claim 1, wherein the filter comprises a bag.
17. The filter as in claim 16, wherein the bag is folded.
18. The filter as in claim 16, wherein the bag comprises two sheets of filter material sealed together.
19. The filter as in claim 1, wherein the filter comprises ribs.
20. A filter for an ink jet pen, comprising a filter material configured to attach to the pen, wherein an effective filtration surface area of the filter is substantially greater than any projection surface area of the filter.
21. The filter as in claim 20, wherein the effective filtration surface area of the filter is substantially greater than any projection surface area of the filter.
22. The filter as in claim 20, wherein the filter comprises a chamber more than half bounded by the filter material.
23. The filter as in claim 22, wherein a flow direction of ink into the chamber is substantially different than a flow direction of ink from the chamber.

24. A filter for an ink jet pen, comprising:
an ink filter material configured to attach to the pen; and
a chamber at least partially bounded by the filter material,
wherein a flow direction of ink into the chamber is substantially different than a
flow direction of ink from the chamber, wherein the filter material comprises more
than half of a surface area of the chamber.
25. An ink jet pen, comprising:
a pen body; and
a filter comprising a filter material for filtering ink,
wherein a flow of ink through the filter is substantially multidirectional.
26. The ink jet pen as in claim 25, wherein an effective filtration surface area
of the filter is substantially greater than any projection surface area of the filter.
27. The ink jet pen as in claim 25, wherein the filter material comprises pores
having a dimension less than a dimension of a smallest ink flow passage in the
pen.
28. The ink jet pen as in claim 25, wherein the filter material is pleated.
29. The ink jet pen as in claim 25, wherein the filter comprises a chamber at
least partially bounded by the filter material.
30. The ink jet pen as in claim 29, wherein a flow direction of ink into the
chamber is substantially different than a flow direction of ink from the chamber.
31. The ink jet pen as in claim 30, wherein the filter material comprises more
than half of a surface area of the chamber.
32. The ink jet pen as in claim 29, further comprising a pressure regulator.

33. The ink jet pen as in claim 32, wherein the regulator is positioned inside the chamber.
34. The ink jet pen as in claim 29, wherein the filter further comprises an ink passage flange to attach the filter to the pen body.
35. The ink jet pen as in claim 34, wherein ink flows into the chamber via the flange.
36. The ink jet pen as in claim 34, wherein ink flows from the chamber via the flange.
37. The ink jet pen as in claim 34, wherein the flange is attached to the filter material by an adhesive.
38. The ink jet pen as in claim 34, wherein the flange is attached to the filter material by melting the flange.
39. The ink jet pen as in claim 25, wherein the filter is cylindrical.
40. The ink jet pen as in claim 25, wherein the filter has a rectangular cross section.
41. The ink jet pen as in claim 25, wherein the filter comprises a bag.
42. The ink jet pen as in claim 41, wherein the bag is folded.
43. The ink jet pen as in claim 41, wherein the bag comprises two sheets of filter material sealed together.
44. The ink jet pen as in claim 25, wherein the filter comprises ribs.

45. A method of filtering ink in an ink jet pen, comprising flowing the ink through a filter material configured to attach to the pen, wherein a flow of ink through the filter material is substantially multidirectional.

46. The method as in claim 45, wherein an effective filtration surface area of the filter material is substantially greater than any projection surface area of the filter material.

47. The method as in claim 45, wherein the filter material bounds a chamber, wherein the chamber is more than half bounded by the filter material.

48. The filter as in claim 47, wherein a flow direction of ink into the chamber is substantially different than a flow direction of ink from the chamber.